

Claims:

1. A computer implemented method for organizing data, the method comprising the steps of:

capturing a data stream;

5 identifying data in the captured data stream; and

mapping the identified data to at least one of a file structure, a schema, and a taxonomy.

2. The method of claim 1, wherein the steps of capturing and identifying are performed by different computers.

10 3. The method of claim 1, comprising:

storing the captured data stream;

wherein the identifying step is performed on the stored data stream.

4. The method of claim 1, wherein the steps of capturing and identifying are performed at different locations.

15 5. The method of claim 1, wherein:

the step of identifying comprises identifying a first value in a first currency;

and

the step of mapping comprises determining a second value in a second currency, based on the first value and a conversion factor.

20 6. The method of claim 5, wherein a user specifies the second currency and the conversion factor.

7. The method of claim 6, wherein the user specifies the conversion factor by indicating a date on which the conversion factor is known.

8. The method of 1, wherein:

the identified data are organized in accordance with a first standard; and

the step of mapping comprises organizing the identified data in accordance with a second standard.

5           9. The method of 8, wherein:

the first standard is one of United States GAAP (Generally Accepted Accounting Principles), and International GAAP; and

the second standard is the other of United States GAAP and International GAAP.

10           10. The method of claim 1, wherein the step of mapping maps the identified data to an eXtensible Markup Language (XML) taxonomy.

11. The method of claim 1, wherein the step of mapping maps the identified data into a spreadsheet.

15           12. The method of claim 1, wherein the step of mapping maps the identified data into a database.

13. The method of claim 1, wherein the step of mapping maps the identified data to a flat file.

14. The method of claim 13, comprising outputting a data definition that defines a structure of the flat file.

20           15. The method of claim 14, wherein the structure indicates locations of the mapped data within the flat file.

16. The method of claim 1, wherein the data stream is in the form of a data output to a computer display screen.

17. The method of claim 1, wherein the data stream is in the form of a data output to a computer data port.

5           18. The method of claim 1, wherein the data stream is in the form of a data output to a data storage device.

19. The method of claim 18, wherein the data storage device is a Random Access Memory in a computer.

20. The method of claim 1, wherein the data storage device is a disk drive.

10           21. The method of claim 1, wherein the data stream is generated at an Operating System level of a computer implementing the method.

22. The method of claim 1, wherein:  
the identifying step comprises identifying metadata in the data stream;  
and the mapping step comprises selecting labels that correspond to the  
15 identified metadata, based on a list associating labels with metadata.

23. The method of claim 22, comprising a step of adding the selected labels into the data stream to label at least one of the identified metadata and the identified data.

24. The method of 23, comprising the step of removing non-selected labels  
20 from the data stream.

25. The method of claim 23, comprising a step of creating a file by combining the selected labels with at least the identified data.

26. The method of claim 22, comprising a step of requesting a user to select a label corresponding to a metadatum in the identified data, when the list  
5 does not associate a label with the metadatum.

27. The method of claim 26, comprising a step of adding the association indicated by the user's selection, to the list associating labels with metadata.

28. The method of claim 22, wherein the list comprises a plurality of labels associated with a metadatum.

10 29. The method of claim 28, wherein the plurality of labels comprises synonymous labels.

30. The method of claim 28, wherein the metadatum is identified in the data stream based on a label in the data stream corresponding to the metadatum.

15 31. The method of claim 30, wherein the selected label is different from the label in the data stream.

32. The method of 28, wherein:  
the identifying step comprises identifying the metadatum in the data stream;  
and

20 the mapping step comprises selecting a label from the plurality of labels associated with the identified metadatum.

33. The method of claim 32, wherein the labels in the plurality are in different languages.

34. The method of claim 33, wherein the selected labels are in a specified one of the different languages.

5           35. The method of claim 34, wherein the specified language is XBRL (Extensible Business Markup Language).

36. The method of claim 34, wherein the selected labels are in a specified human spoken language.

10           37. The method of claim 22, wherein the labels are consistent with XML (eXtensible Markup Language).

38. The method of claim 37, wherein the labels conform to an XBRL (eXtensible Business Reporting Language) specification.

39. The method of claim 38, wherein the labels are defined in at least one XBRL taxonomy.

15           40. The method of claim 22, wherein the metadata comprises at least one text string.

20           41. The method of claim 1, comprising a step of providing the data stream from a target program to a transformation program, wherein the transformation program a) performs the steps of identifying and mapping, and b) appears to the target program as a device driver.

42. The method of claim 41, wherein the transformation program is independent from the target program.

43. The method of claim 41, wherein the transformation program and the target program are modules incorporated within a single program.

5           44. The method of 1, wherein the data stream is in a form of data output to a computer printer.

45. A method for transferring information between computers, comprising:  
in a first computer, converting the mapped data from a first format to an  
intermediate format; and

10           transferring the converted information to a second computer.

46. The method of 45, comprising:  
at the second computer, receiving the transferred information and  
converting the received information from the intermediate format to a second  
format.

15           47. The method of 46, wherein the intermediate format is consistent with an XML (eXtensible Markup Language) taxonomy.

48. The method of 46, comprising:  
encrypting the information prior to transferring; and  
decrypting the received transferred information.

20           49. The method of 46, comprising:  
performing the steps of converting in the first computer and transferring, in  
response to a request from the second computer.

50. A method for transferring information between computers, comprising:  
in a first computer, converting information that is to be transferred, from a  
first format to an intermediate format; and  
transferring the converted information to a second computer.

5 51. The method of 50, comprising:  
at the second computer, receiving the transferred information and  
converting the received information from the intermediate format to a second  
format.

10 52. The method of 51, wherein the intermediate format is consistent with  
an XML (eXtensible Markup Language) taxonomy.

53. The method of 51, comprising:  
encrypting the information prior to transferring; and  
decrypting the received transferred information.

15 54. The method of 51, comprising:  
performing the steps of converting in the first computer and transferring, in  
response to a request from the second computer.

55. A method for adding labels to data, the labels including information  
about the data and being defined in at least one taxonomy, the method comprising  
the steps of:  
20 a transformation program receiving an electronically represented file from a  
target program, wherein the transformation program appears to the target program  
as a printer driver;  
transformation program identifying data in an electronically represented  
file; and

the transformation program selecting labels that correspond to metadata in the identified data, based on a list associating labels with metadata.

56. The method of claim 55, comprising the step of the transformation program adding the selected labels into the electronically represented file to label at least one of a) the elements in the identified data associated with the metadata, and b) the metadata.

57. The method of claim 55, comprising the step of the transformation program creating a new file by combining the selected labels with at least the identified data from the electronically represented file to label at least one of a) the elements in the identified data associated with the metadata, and b) the metadata.

58. A method for forming an import file template for importing at least a portion of a data set into a target application, the data set including labels indicating information about data in the data set, the labels being defined in at least one taxonomy, the method comprising the steps of:

the target application exporting data in an export file;  
a user associating at least one of the entries in the export file with at least one of the labels; and  
forming the import file template based on a format of the export file and the associated at least one entry and at least one label; and  
entering data from the data set into the import file template based on labels associated with both the data from the data set being entered and entries in the import file template.

59. The method of 58, comprising the step of storing the associations made by the user.



60. The method of 59, wherein the labels are consistent with XML (eXtensible Markup Language).

61. The method of 60, wherein the labels conform to an XBRL (eXtensible Business Reporting Language) specification.

5           62. The method of claim 61, wherein the target program is not XBRL compliant.

63. A method for importing at least a portion of a data set into a target application, the data set including labels indicating information about data in the data set, the labels being defined in at least one taxonomy, the method comprising  
10       the steps of:  
          the target program exporting data in an export file;  
          a user associating entries in the export file with ones of the labels; and  
          forming an import file by replacing data in the export file at entries  
15       associated with ones of the labels, with data from the data set, the replacement data having the same labels as the entries.

64. A method for inputting at least a portion of a set of data into a target application, the data set including labels indicating information about data in the data set, the labels being defined in at least one taxonomy, the method comprising  
20       the steps of:  
          monitoring entry of data associated with the labels into the target application, and storing key strokes associated with the entry of data for each different label;  
          receiving the data set; and

entering data from the data set into the target application, by performing the stored key strokes corresponding to the labels associated with the data in the data set.

65. The method of 64, wherein the program observing the user is a  
5 memory resident program.

66. The method of 64, comprising the step of prompting the user to enter a data item into the target application, when no key strokes have been stored for a label associated with the data item.

67. A method for inputting at least a portion of a data set into a target  
10 database, the data set including labels indicating information about data in the data set, the labels being defined in at least one taxonomy, the method comprising the steps of:

inputting test data into the target database;  
searching the database for patterns corresponding to the test data;  
15 modeling a structure of the database based on the search results; and  
directly accessing the database using the modeled structure to perform at least one of inserting data into, or retrieving data from, the database.

68. The method of claim 67, wherein the step of searching is performed by a pattern recognition application.

69. The method of claim 67, comprising the step of associating locations  
20 within the database structure with labels, the labels corresponding to elements of the test data found at the locations during the step of searching.

